REVISION OF THE AUSTRALIAN CURCULIONIDE BELONGING TO THE SUBFAMILY CRYPTORHYNCHIDES.

PART VII.

BY ARTHUR M. LEA, F.E.S.

Genus Blepiarda, Pascoe, Journ. of Ent. ii. p.430, 1866.

Head small, not concealed; ocular fovea small and deep. Eyes large, subtriangular, finely faceted, distant. Rostrum long and rather thin, feebly curved, longer than prothorax. rather prominent, each tridentate internally. Antennæ slender, sexually variable; scape of 3 inserted at apex of rostrum, the length of funicle and club combined; of Q inserted slightly nearer apex than base, shorter than funicle and club combined: two basal joints of funicle elongate; 4th-7th transverse; club elongate, cylindrical, apparently not jointed, in 3 shorter than funicle, in Q the length of or shorter than funicle. Prothorax transverse, disc scarcely convex, apex produced, narrow and raised, base bisinuate; ocular lobes prominent but slightly obtuse. Scutellum moderately large and distinct. Elytra about thrice the length of, closely applied to prothorax, and not much wider at base; base trisinuate, shoulders feebly produced, apex rounded. Pectoral canal rather narrow and deep, terminated between four anterior coxæ. Mesosternal receptacle raised, walls thin and rapidly sloping behind, keeled along middle, emargination very feebly transverse, U-shaped; cavernous. Metasternum moderately large, very slightly shorter than basal segment of abdomen; episterna large. Abdomen moderately large, sutures distinct; 1st segment slightly longer than 2nd, its apex rather strongly incurved to middle, intercoxal process rounded and narrow; 3rd and 4th large, feebly rounded, their combined length slightly more than

that of 2nd and considerably more than that of apical. Legs rather short, except the anterior in $\hat{\varsigma}$; femora grooved and feebly dentate, posterior terminated considerably before apex of abdomen; tibiæ compressed, straight, except at extreme base; tarsi moderately long, 3rd joint wide, deeply bilobed, claw-joint elongate, setose. Subelliptic, squamose, punctate, feebly tuber-culate, winged.

This genus belongs to M. Lacordaire's "groupe" Mecistostylides, and finds its nearest allies in the New Zealand genera Mecistostylus and Paranomocerus rather than in the Australian Protopalus. The sexual distinctions are very pronounced. Six species have been described from Australia, New Guinea and Fiji.

Berpiarda undulata, Pase., Journ. of Ent. ii. 430, pl.xvii. fig 12; Mast. Cat. Sp. No. 5571.

3. Black, subopaque, antennæ piceous or reddish-piceous. Upper surface densely clothed with rounded scales, much larger on prothorax than on elytra. Scales of prothorax almost uniform in colour, but varying on different specimens from almost white to pale ochreous-brown. A triangular patch of similar scales on elytra limited by a line drawn from each shoulder to suture at about the middle; a small and very distinct rounded spot of pale scales on each elytron near apex and feebly or not at all connected with apex; elsewhere the scales vary from ochreous to dark velvety-brown. Head and rostrum sparsely squamose; the funicle with long recurved hair on one side, setose hair on the other. Club finely pubescent. Under surface with ochreous and sooty scales rather sparsely and unevenly distributed.

Head densely punctate: excavated along middle, the excavation widest and deepest on forehead. Rostrum rather coarsely punctate throughout: sides dilated near base, middle with a distinct carina continuous from ocular fovea to a shallow longitudinal excavation between antennæ, a feeble waved carina on each side of the median one. Second joint of funicle distinctly longer than 1st, 4th-7th feebly decreasing in width. Prethorax triangular, moderately transverse, very feebly convex, raised in

front; apex higher than elytra, less than one-fourth the width of base and feebly bifurcate; disc with feeble elevations and depressions, four small but moderately distinct fasciculate tubercles across middle, a feeble carina showing between the two median; densely punctate, punctures concealed. Elytra somewhat flattened beneath the pale basal scales, the sides and apex strongly declivous; striate-punctate, punctures large but somewhat irregular; interstices the width of or wider than punctures, feebly convex; suture, 3rd and 5th feebly raised and subfasciculate in parts, in places feebly connected by transverse or oblique subfasciculate elevations. Under surface moderately densely but feebly punctate, apical segment densely and strongly punctate. Femora densely punctate, the anterior long and rather acutely dentate but feebly grooved, the posterior feebly dentate and strongly grooved. Length 10½, rostrum 4; width 5½ mm.*

Q. Differs in having the excavation on the forehead narrower and deeper; rostrum shorter and glabrous except at base, thinner and finely but at base moderately strongly punctate, raised but not carinate at middle, greatest width at (not near) extreme base and least at apex; insertion of antennæ and relative lengths of its parts different, funicle with ordinary setæ and the anterior legs only as long as the posterior.

Hab.—Q.: "Cape York" (Pascoe)—N.S.W.: Tweed and Richmond Rivers (Lea).

A remarkable and, so far as I am aware, unique (in the Australian Cryptorhynchides) feature of the $\mathcal E$ is that the joints of the funicle diminish in width from the middle to both base and apex; the difference is certainly slight, but it can be seen at a glance. The peculiar velvety fasciculate elevations on the elytra are not at all constant in shape or position; in some specimens they appear as feeble waved lines, in others as more or less irregular rings, but they are usually more pronounced across the middle and very rarely encroach on the pale basal scales.

^{*} A small male under examination measures but 5 mm. in length.

Blepiarda vitiata, Pasc., Journ. Linn. Soc. Zool. xi. 1871, p.210.

Q. Reddish-brown or piceous; rostrum red or piceous; antennæ (club excepted) paler than rostrum. Upper surface densely squamose. Scales of prothorax of an uniform fawn colour, stouter than those of elytra and suberect. Elytra with similarly coloured scales forming a subtriangular basal patch, bounded behind by a line drawn from the shoulders to the suture before the middle, a small distinct elongate spot of pale scales on each side near apex; elsewhere with brown scales. Head and base of rostrum with scales varying from almost white to sooty-brown, a moderately distinct spot on each side behind eyes. Under surface with rather sparse but evenly distributed scales, varying from white to sooty, the darker scales short and stout, the paler long and thin; legs rather densely clothed with scales, similarly varying in colour, but all more or less elongate.

Head densely punctate; longitudinally and rather narrowly excavated in middle. Rostrum wider at base than at apex; smooth and finely punctate, towards base rather coarsely punctate. Two basal joints of funicle equal in length, 3rd-7th transverse and equal in width. Prothorax strongly transverse, apex feebly produced and about half the width of base, sides parallel on basal half, disc feebly convex, very feebly tuberculate, tubercles feebly fasciculate, four moderately large ones forming a median transverse row, a feeble carina showing between the two median; apex very feebly bifasciculate; densely punctate, punctures concealed. Elytra raised at base, not much wider than prothorax, strongly convex, middle level with apex of prothorax; striatepunctate, punctures moderately large but partially concealed, interstices wide, feebly convex, 3rd with about five or six feeble fasciculate tubercles, 5th with three, suture with two or three near summit of posterior declivity. Metasternum with large round punctures, rather sparse in middle, very large and rather numerous towards sides; episterna each with a single row of large, round punctures. Abdomen with moderately large but not very numerous punctures, a distinct row across each of the

intermediates. Femora feebly dentate and, except the posterior, feebly grooved. Length 8, rostrum $2\frac{3}{4}$; width 4 mm.

Hab.—Queensland (Herr J. Faust). Described by Mr. Pascoe as coming from Aru.

I have two specimens under examination; in one of them the rostrum is almost black, in the other it is almost a bright red. The excavation on the head is much less pronounced than in undulata, and cannot be seen from above, although very distinct if viewed from along the rostrum; the eyes are more coarsely faceted, the two basal joints of the funicle are equal, the disc of the prothorax is not triangular, and the apex is not raised above the level of the elytra; these are not triangularly flattened at the base; the punctures of the under surface, especially at the sides of the metasternum and on its episterna, are very much larger, and the whole insect is considerably smaller.

Genus Pezichus, Waterhouse.

Trans. Ent. Soc. Lond. (2) ii. p.193; Lacord., Gen. Col. vii. p.126. Head convex, not concealed. Eyes large, coarsely faceted, almost touching beneath. Rostrum long and thin, feebly or moderately curved. Antennæ long and thin; scape in Q inserted about one third from apex, in 3 almost at extreme apex; 2nd joint of funicle long or very long; club long or very long, joints not visible. Prothorax subconical, deeper than wide, ocular lobes obtuse and almost level with apex, constriction shallow, base truncate. Scutellum small. Elytra widest at base and considerably wider than prothorax. Pectoral canal deep and narrow, terminated between intermediate coxe. Mesosternal receptacle sloping from base to apex, U-shaped; slightly cavernous. Metasternum shorter than the following segment, episterna rather wide. Abdomen with straight sutures. Legs long and thin; femora dentate and very feebly grooved, posterior passing elytra; tibiæ compressed and slightly curved; tarsi thin, 1st joint very long. Convex, moderately squamose, fasciculate, winged.

A remarkable genus, allied to Protopalus, as noted by Mr. Waterhouse.

Pezichus binotatus, Waterh.; Mast. Cat. Sp. No. 5565.

Black, opaque, antennæ and apical joints of tarsi reddish. Above with irregular and not dense ferruginous scales, denser on elytral suture, prosternum and legs than elsewhere; sparse on under surface and subfasciculate on elytral tubercles; on rostrum of Q at base only, on G almost to middle. A small whitish fascicle on each side of elytra just behind the middle on 3rd interstice.

Head with three small rounded nude spaces in the middle like a pawnbroker's sign, in Q two only. Rostrum in 3 almost as long as anterior femora, almost straight, a feeble carina extending to apical third (which is shining); with two almost obsolete rows of punctures on each side of carina; in Q the rostrum is shorter and more curved, shining almost its entire length, carinate and punctate only on basal fourth. Antennæ in 3 very elongate; scape inserted almost at extreme apex of rostrum; 1st joint of funicle short, not one-third the length of 2nd, 2nd as long as four following combined and a little longer than club, 7th shortest of all; in Q the scape is inserted about one-third from apex, 2nd joint of funicle not three times as long as 1st, not as long as four following combined, and shorter than club, which is a little thicker than in 3. Prothorax longer and deeper than wide, apex rounded, basal two-thirds parallel, ocular lobe rounded; a narrow shining carina extending from apex and becoming feebler at base; upper sides with regular granules; lower punctate. Scutellum small, round, elevated, almost nude. Elytra about once and one-half the width of prothorax and more than twice its length, shoulders oblique; with regular rows of punctures that are more distinct towards the sides; interstices convex and wider than punctures, 3rd and 5th feebly, the 7th and 9th still more feebly tuberculate; apex narrow and feebly emarginate. Mesosternal receptacle twice as long as wide. Basal segment of abdomen in 3 not twice the length of 2nd, sparsely punctate, intercoxal process narrow, truncate, its sides raised and parallel, 2nd not distinctly longer than 3rd, both flattened in the middle, 3rd with

an oblique row of squamose punctures on each side of middle, 4th strongly punctate and, conjointly with the 5th, largely excavated, 5th with a distinct keel or ridge on each side; in Q the intercoxal process is not raised at the sides and is less parallel than in G, 3rd with a feeble transverse row of punctures, 4th and 5th not excavated. In G posterior femora shining beneath, and not dentate; tibiæ narrow, especially at apex, in the posterior without spur, apical third shining and feebly twisted; tarsi very long, 1st joint as long as the rest combined, 2nd not twice as long as 3rd, 4th as long as 2nd and 3rd combined; in Q the femora have an almost obsolete ridge terminating at tooth, all the legs shorter than in G, posterior tibiæ neither twisted nor shining, and with apical hook. Length G 11, rostrum G, width G 12 via G 11 via G 11, rostrum G 12 via G 11 via G 12 via G 12 via G 13 via G 13 via G 13 via G 13 via G 14 mm.

Hab.—Q.: "Moreton Bay" (Waterhouse), Brisbane(Illidge)—N.S.W.: Tweed River (Helms and Lea).

The shining and edentate posterior femora, peculiar curvature and absence of terminal hook of the posterior tibiæ, and excavation of apical segment in the \mathcal{S} , as well as the antennæ and tarsi of both sexes are unique in the subfamily.

Pezichus gracilis, n.sp.

Black, subopaque; antennæ and apical joints of tarsi reddish. Prothorax with sparse sooty scales and with a distinct fascicle in the middle; elytra with minute scales and with fascicles on 3rd and 5th interstices, a feeble pale fascicle on 3rd at summit of posterior declivity. Prosternum with whitish scales, rest of under surface feebly squamose. Legs with sooty, intermingled with longer and whitish, scales.

Head with a feeble median carina; with large squamose punctures. Rostrum distinctly curved, with smaller and denser punctures than on head continued almost to scape, a feeble shining carina indistinct near base; apex shining. Scape inserted about one-fourth from and more than one-half its length passing apex, its extreme base very narrow; 1st joint of funicle thick, as long as 2nd, 2nd not longer than two following combined; club-

as long as 5 apical joints and thicker than in the preceding species. Prothorax longer and deeper than wide; densely covered with large regular punctures; ocular lobes a little more prominent than in the preceding species; a distinct fasciculate tubercle slightly in advance of the middle. Scutellum small, feebly raised, longer than wide, squamose. Elytra about once and onehalf the width of prothorax and more than twice its length, base almost truncate, shoulders feebly rounded; interstices convex, 3rd and 5th obsoletely tuberculate beneath fascicles, with regular rows of punctures, smaller and more elongate on disc and towards apex, larger at sides, especially near base. Mesosternal receptacle wider than long. Abdomen coarsely punctate; 1st segment not once and one-half the length of 2nd, intercoxal process subtriangular, 2nd not much longer than 3rd or 4th and sloping, its middle with several deep irregular foveæ or large punctures; 5th not as long as 3rd and 4th combined and densely punctate. Legs as in the Q of the preceding species, 1st tarsal joint not much longer than 4th. Length 5, rostrum 13; width 24 mm.

Hab.—N.Q.: Barron Falls (Mr. A. Koebele).

Besides the many prominent distinctions between this and the preceding species, the elytra are more convex, more suddenly elevated at the base, without even feeble tubercles elsewhere than on the 3rd and 5th interstices, and the punctures are larger. The unique specimen under examination is perhaps a female; the punctures of the rostrum and abdominal segments might be regarded as characteristic of the male sex, but these appear to be more than counterbalanced by the curvature of the rostrum, insertion of scape, dentate posterior femora, non-excavated apical segments and intercoxal process of abdomen not parallel-sided.

NEOMYSTOCIS,* n.g.

Head rather large and convex, not concealed. Eyes large, ovate, moderately separated, very finely faceted. Rostrum long, thin and curved. Antennæ thin; scape inserted nearer apex than base of rostrum and shorter than funicle; two basal joints of the

^{*} νεόμυστος, newly dedicated; κίς, weevil.

latter elongate; club elongate, the joints with oblique sutures. Prothorax transverse, base bisinuate, sides rounded, constriction feeble, ocular lobes rounded but not obtuse. Scutellum distinct. Elytra wider than prothorax and more than twice as long. Pectoral canal deep and narrow, terminated between intermediate coxe. Mesosternal receptacle raised in front, U-shaped; open. Metasternum slightly shorter than the following segment; episterna of moderate width. Abdomen with straight sutures, 1st segment almost as long as 2nd and 3rd combined, 3rd and 4th combined slightly longer than 2nd or 5th. Legs long; femora dentate, not grooved, posterior passing elytra; tibie compressed and thin, almost straight; tarsi almost the length of tibie, 1st and 4th joints elongate. Elliptic, moderately convex, squamose, tuberculate, winged.

Allied rather closely to *Pezichus*, but may be at once distinguished by the decidedly open mesosternal receptacle. Of the species described below, I have only a female specimen under examination.

NEOMYSTOCIS SQUAMIVENTRIS, n.sp.

Q. Black, antennæ dull red. Rather densely clothed with small muddy-fawn coloured scales feebly tinged in places (apex and lower flanks of prothorax and 2nd abdominal segment) with yellowish-green, a small spot of sooty scales on each side of middle of prothorax, a moderately large round patch on 1st abdominal segment and a few loose scales on elytral tuberosities. Rostrum, except at sides of base, scutellum and prothoracic carina bare and shining. Pectoral canal rather densely clothed throughout.

Head with small, dense, concealed punctures; feebly depressed between eyes. Rostrum rather strongly curved, considerably longer than prothorax, shining and lightly punctate, punctures denser and larger (but still small) at base than elsewhere. Scape inserted two-fifths from apex of rostrum and the length of the five following joints; funicle with the 1st and 2nd joints equal and each the length of 3rd and 4th combined, each of these the length of 5th and 6th combined, 5th slightly longer than 6th or 7th, these with pubescence as on club. Prothorax rather

strongly transverse, base distinctly bisinuate and more than twice the width of apex; punctures small and concealed; with a short shining median carina but which is feebly traceable to apex, each side of apex with a short obtuse ridge. Scutellum suboblong. Elutra oblong-cordate, one-fourth wider than prothorax and almost thrice as long, base trisinuate, widest across shoulders, thence feebly decreasing to apical fourth which is rather strongly arcuate; with series of moderately large but almost entirely concealed punctures; interstices wider than punctures but not convex or regular, with feeble (a moderately distinct one on 3rd interstice at basal third and another about the middle) tubercular elevations scattered about and more numerous (but smaller) on posterior declivity than elsewhere. Under surface feebly and very indistinctly punctate. Femora not very strongly but acutely and very distinctly dentate. First joint of tarsi longer than 2nd and 3rd combined, 2nd twice the length of 3rd, the two combined equal to the 4th. Length 11, rostrum 31; width 5 mm.

Hab.—Q.: Mount Bellenden-Ker (Rev. T. Blackburn; No.3082).

Episodiocis,* n.g.

Head moderately large and convex, not concealed. Eyes moderately large, ovate, lateral, rather finely faceted. Rostrum long, thin and curved. Antennæ thin; scape inserted nearer apex than base of rostrum and the length of funicle; two basal joints of the latter elongate; club briefly ovate. Prothorax transverse, sides rounded, base bisinuate, apex feebly produced, ocular lobes somewhat obtuse. Scutellum distinct. Elytra considerably wider than prothorax, base trisinuate. Pectoral canal rather deep and narrow, terminated between intermediate coxe. Mesosternal receptacle feebly and equally raised, elongate U-shaped; open. Metasternum the length of the following segment; episterna moderately wide. Abdomen with straight sutures; 1st segment shorter than 2nd and 3rd combined, 3rd and 4th combined distinctly longer than 2nd or 5th. Legs rather short, femora moderately stout, dentate, not grooved, posterior not

^{*} ἐπεισόδίος, episodic; κίς.

extending to apex of abdomen; tibiæ slightly compressed; tarsi shorter than tibiæ, 4th joint moderately long. Elliptic, moderately convex, squamose, winged.

Allied to the preceding genus, but the eyes smaller and with larger facets, the club of the antennæ much shorter and with almost straight sutures and the legs shorter. The mesosternal receptacle in both is U-shaped, but in the preceding genus it is raised in front and almost obliterated at base, so that the termination of the pectoral canal is not sharply defined. In the present genus, although decidedly open, the termination of the canal is sharply defined.

Episodiocis microderes, n.sp.

\$\mathcal{G}(\exists)\$. Black, antennæ dull red. Densely clothed with ochreousbrown scales, scutellum with whitish scales. Under surface (except between four posterior coxæ, where the scales are darker and denser) with longer, paler and sparser clothing than elsewhere. Head and basal third of rostrum densely clothed.

Head with dense concealed punctures. Rostrum moderately curved, slightly longer than prothorax; shining and finely punctate except at base where the clothing is dense and the punctures rather coarse. Scape inserted slightly closer to apex than base of rostrum; 1st joint of funicle the length of 2nd-3rd combined. 2nd the length of 3rd-4th combined, 7th moderately transverse. Prothorax small, base lightly bisinuate and less than twice the width of apex; punctures dense but concealed. Scutellum suboblong. Elytra oblong-cordate, once and one-half the width and almost thrice the length of prothorax, base trisinuate, shoulders oblique, sides subparallel to apical third; with series of rather strong but almost concealed punctures; interstices not convex. much wider than punctures, third with two feeble tubercular elevations (one at basal third and one at middle), the fifth with one (forming the preapical callus). Under surface rather densely but not very distinctly punctate. Femora stout and rather obtusely dentate. Length 7, rostrum 2; width 3\frac{1}{4} mm.

Hab.—N.S.W.: Clarence River (Macleay Museum).

Anepigraphocis,* n.g.

Head rather large and convex, not concealed. Eyes large, coarsely faceted, distant. Rostrum long and rather thin, distinctly curved. Antennæ moderately thin; scape inserted closer to apex than base of rostrum, the length of funicle; two basal joints of the latter moderately long; club of moderate size, elliptic-ovate. Prothorax transverse, base bisinuate, constriction deep but irregular, ocular lobes very obtuse. Scutellum distinct. Elytra elongate-cordate, wider than prothorax and each separately rounded at base. Pectoral canal deep and narrow, terminated between intermediate coxe. Mesosternal receptacle feebly raised, U-shaped; slightly cavernous. Metasternum shorter than the following segment, episterna distinct. Abdomen with straight sutures: 1st segment as long as the two following combined, intercoxal process narrow; 2nd, 3rd and 4th equal in length, each slightly shorter than 5th. Legs rather long and thin; femora not grooved, edentate, posterior not passing elytra, tibiæ lightly curved; tarsi moderately long, 4th joint longer than 1st. Elliptic, convex, winged.

Possibly close to Mr. Pascoe's genus *Glyphagia*, but the ocular lobes distinct, the mesosternal receptacle cavernous, the femora not grooved and edentate, the tarsi with the 4th joint distinctly longer than the 1st, and the 3rd rather widely bilobed.

Anepigraphocis basiventris, n.sp.

Black, subopaque, antennæ and claw-joints reddish-brown. Prothorax with thin setose scales, one in each puncture; elytra with large adpressed reddish-ferruginous scales, a distinct oblique stripe of cream-coloured scales from each shoulder to near suture just before middle, and a longitudinal patch on each side of apex. Under surface very sparsely squamose except for a patch on each side in front of anterior coxæ; the middle of the metasternum and of basal and apical segments of abdomen with dense setæ; legs rather sparsely squamose. Head and rostrum almost glabrous.

^{*} ἀνεπίγραφος, without a title; κίς.

Head with sparse and moderately large punctures not at all concealed. Rostrum slightly longer than prothorax, sides almost parallel, with rather sparse and small elongate punctures, no denser towards base than elsewhere; with a very feeble median ridge from base to between antennæ. Scape inserted two-fifths from apex of rostrum; 1st joint of funicle slightly shorter than 2nd, the others subglobular. Prothorax moderately transverse; with large, deep, not very dense but in places confluent punctures. Elytra about once and one-half the width and almost thrice the length of prothorax; striate-punctate, punctures deep and longer than wide, of large size but partially concealed; interstices scarcely separately convex, regular and wider than punctures. Under surface with sparse and indistinct punctures, except for a few of moderate size at sides of metasternum and of 1st and 5th abdominal segments; the 1st with a subcircular flat (setose) space in the middle from which the sides rapidly slope away. Posterior femora almost extending to apex of abdomen. Length 8, rostrum 23; width 4 mm.

Hab.—Swan River (Herr J. Faust).

A remarkably distinct species. The clothing of the metasternum and basal segment of abdomen, with the shape of the latter are almost unique in the subfamily. The prothoracic punctures are of an unusual character, and each contains a long thin scale, the surface elsewhere being nude.

BLEPTOCIS,* n.g.

Eyes subapproximate. Pectoral canal terminated between four anterior coxe. Mesosternal receptacle feebly raised, base rather stout, emargination briefly U-shaped, cavernous. Metasternum longer than the following segment; episterna rather narrow. Second segment of abdomen the length of 5th and slightly but noticeably longer than 3rd or 4th. Legs long and thin; femora dentate and feebly grooved. Other characters as in the preceding genus.

This genus is very close to the preceding one, but the above characters should prevent the two from being confounded together.

^{*} βλεπτος, worth seeing; κίς.

BLEPTOCIS COLLACERATUS, n.sp.

3 (?). Black and moderately shining; antennæ dull red, club darker. Apical third of prothorax and posterior declivity of elytra (except on sides) with dense white scales, rest of upper surface with indistinct and very sparse sooty and obscure whitish scales. Under surface, legs, head and rostrum with rather sparse sooty and white or whitish scales.

Head with coarse but rather indistinct punctures. Rostrum slightly longer than prothorax, not very thin, distinctly curved; with moderately coarse punctures throughout but partially concealed behind antennæ, behind which is a feeble median ridge. Scape inserted two-fifths from apex of rostrum and very slightly shorter than funicle; two basal joints of the latter equal in length, 5th-7th transverse. Prothorax moderately transverse, base bisinuate, sides rounded; with coarse confluent punctures, the interspaces appearing as granules; with a very distinct shining and almost continuous median carina. Scutellum convex, its outlines rounded. Elytra elongate-cordate, about thrice the length and once and one-third the width of prothorax, each separately rounded at base and apex, sides subparallel to near apex; with deep, more or less oblong and very large punctures or foveæ, except posteriorly; interstices much narrower than and considerably interrupted by punctures; suture distinctly granulate, a few granules elsewhere. Under surface with indistinct punctures except for some large ones at the sides between the four posterior coxe. Legs thin and densely punctate; femora rather finely but acutely dentate, posterior extending to apical segment. Length 61, rostrum 2; width 3 mm.

Hab.—N.S.W.: South Country (type in Macleay Museum).

The white (or cream-coloured) patches of scales at the apex of prothorax and elytra are very distinct and sharply defined. The elytral punctures are unusually large, the alternate interstices between them being feebly raised, this elevation being more distinct to the naked eye than under a lens. "South Country" probably means about Goulburn.

Genus Glochinorrhinus, Waterhouse.

Trans. Ent. Soc. Lond. (2) ii. p.194, Proc. p.cii. 1853; Lacord., Gen. Col. vii. p.103.

Head moderately large, convex, not concealed; ocular fovea small, narrow. Eyes slightly produced in front, finely faceted, distant. Rostrum long, slightly curved; in 3 widening to apex and laterally barbed, in Q subparallel, smooth and shining. Antennæ moderately long; scape in 3 inserted one-third from apex of rostrum, in Q two-fifths; two basal joints of funicle elongate, 7th obconic, longer than 5th-6th combined, subadnate to and appearing to form part of club; club ovate, the length of two preceding joints. Prothorax large, convex, sides rounded, apex produced and somewhat depressed, base bisinuate; constriction feeble; ocular lobes prominent. Scutellum small, distinct. Elytra not twice the length of prothorax; in 3 narrower, in Q the same width as prothorax, in & decreasing from base to apex, in Q subparallel to near apex. Pectoral canal moderately deep, terminated between intermediate coxe. Mesosternal receptacle strongly raised, emargination slightly transverse, slightly cavern-Metasternum about half the length of basal abdominal segment, episterna narrow and wedge-shaped, the anterior portion almost concealed. Abdomen regularly sloping from base to apex, sutures very distinct; 1st segment large, almost as long as 2nd-5th combined, 2nd-4th subequal and each slightly shorter than Legs long and slender; anterior femora feebly ridged beneath at apex, four posterior very feebly dentate, posterior passing elytra; tibiæ much longer in & than in Q; tarsi long and slender (especially in 3), 1st joint almost as long as 2nd-4th combined, 3rd short, deeply bilobed, 4th pubescent. Subcylindrical, convex, tuberculate, squamose, winged.

A very distinct genus, allied to Pezichus as noted by Mr. Waterhouse.

| Prothorax distinctly carinate, strongly depressed at | |
|--|---------------------|
| apex, | Doubledayi, Waterh. |
| Prothorax feebly or not at all carinate, feebly de- | |
| pressed at apex | evanidus, Lea. |

GLOCHINORRHINUS DOUBLEDAYI, Waterh.; Mast. Cat. Sp. No. 5498.

3. Black, opaque; antennæ reddish-piceous. Densely clothed with greyish or brown scales, which, when the insect is alive, have a greenish tinge; three intermediate segments of abdomen nude, except for small patches of scales at the sides and down the middle. Prothorax with long recurved setæ, dark on disc, pale on sides; head and rostrum setose. Ciliation rather long, golden-yellow, irregular, distinctly visible with head in position.

Head scarcely punctate, a feeble longitudinal impression at base. Rostrum granulate and punctate, depressed on each side of apex; each side slightly in front of middle with a strong recurved spine resembling a boar's tusk, a smaller spine close behind it, a small spine in front of ocular fovea. Prothorax with large granules or small tubercles at sides and towards base, with a distinct median carina close to which there are no granules but the setæ are more numerous; apex depressed, sides rounded. Scutellum transverse, densely squamose. Elytra decreasing in width from base to near apex, apex rounded; sides precipitous and strongly seriate-punctate; disc with numerous granules, 3rd interstice with three crests or ridges of granulate tubercles, 5th with about eight small tubercles, some of which are conjoined, 4th with a single conical tubercle, 7th with a row of granules or small tubercles. Length $12\frac{1}{4}$, rostrum $4\frac{1}{2}$, anterior legs 16; width $5\frac{1}{4}$, middle of elytra $4\frac{1}{2}$ mm.

Q. Differs in having the prothorax smaller and not wider than elytra, these less noticeably decreasing in width to apex, the legs (especially the tibiæ and tarsi) shorter, and the rostrum smooth, glabrous and finely punctate. Length 12, rostrum $4\frac{1}{4}$, anterior legs $11\frac{1}{2}$; width 5 mm.

Hab.—Coastal districts of S. Queensland and Northern New South Wales.

An excellent figure of this species is given by the late Mr. A. Sidney Olliff in the Agricultural Gazette of New South Wales [Vol. vi., in a plate facing p.261]. The armature and granulation of the rostrum are variable. In one specimen under examina-

tion the barbs are almost the length of the scapes and project upward and outward and then downward and slightly inward; in another specimen they are scarcely the length of the 1st funicular joint, and are projected backwards and inwards. The males are usually larger than the females. The clothing and elytral tubercles are subject to variation. The length varies from 9 to 16 mm.

GLOCHINORRHINUS EVANIDUS, Lea, Proc. Linn. Soc. N. S. Wales, 1895, Vol. x. (2nd Ser.) p.306; G. Cooki, Faust, Stett. Ent. Zeit. 1895, p.227.

The paper containing the description of *G. evanidus* was read in May and published in November, 1895. Herr J. Faust informs me that *G. Cooki* was not published till February, 1896, so that my name has priority.

Genus Aonychus, Schönherr, Gen. et Spec. Curc. Vol.8 (1), p. 387, Genus 530; Lacordaire, Gen. Col. Tome vii. p.114.

Head slightly convex, not concealed. Eyes large and finely Rostrum long, thin, rounded, distinctly curved. Antennæ thin; scape very short, inserted much closer to base than apex of rostrum; two basal joints of funicle elongate; club elongate-ovate. Prothorax subconical, sides rounded, base bisinuate. Scutellum distinct, semicircularly triangular. cordate, wider than prothorax at base. Pectoral canal narrow, deep, terminating between intermediate coxe, bounded between four anterior coxæ by perpendicular walls formed by supplementary processes of prosternum. Mesosternal receptacle appearing as a small slightly curved ridge between bases of intermediate coxæ; open. Metasternum almost or quite the length of the following segment; episterna large. Two basal segments of abdomen large, 3rd and 4th very short and combined with 5th slightly shorter than 2nd. Legs short; femora edentate; tibie rather thick; tarsi three-jointed, 3rd large, rounded, pad-like. Short or moderately short, convex above and below, densely squamose, non-tuberculate, winged.

The only genus in the subfamily (at least in Australia) in which the claw-joint is entirely absent. The species are all densely clothed with a ground layer of white closely adpressed scales, and with black or brown scales forming various and often extremely variable patterns.

| Elytra striped | lineatus, Pasc. |
|---|------------------|
| Elytra maculate. | |
| Apex of elytra entire | striatus, n.sp. |
| Apex of elytra feebly emarginate. | |
| Rostrum with a few scales at base, form narrow. | |
| Antennæ black | pachypus, n.sp. |
| Antennæ tinged with red | argus, n.sp. |
| Rostrum entirely nude, form broader. | |
| Scales of upper surface white and black | luctuosus, Pasc. |
| Scales white and brown | Hopei, Bohem. |

AONYCHUS HOPEI, Bohem.; Mast. Cat. Sp. No. 5531.

Black, rostrum highly polished, eyes dark brown. Densely clothed all over with white scales mixed on the upper surface with sooty-brown scales, forming on prothorax a broad median stripe; on elytra there is usually a broad sutural stripe to about the middle, when it is suddenly directed outwards to the margins and then becomes marginal to apex, but very irregular; there are usually three large irregular patches of white scales, one on each side at and behind shoulders, and one behind the middle about suture; head with a patch of sooty-brown scales behind eyes; rostrum entirely nude. Ciliation short, sparse, white, moderately distinct when head is removed.

Head densely punctate; ocular fovea shallow, indistinct. Rostrum the length of prothorax, distinctly curved, in \Im slightly enlarged at insertion of antennæ; densely punctate at base, margins and extreme apex less noticeably punctate, smooth elsewhere. Scape not as long as two basal joints of funicle, these subequal, 2nd as long as two following combined, 5th-6th globular, 7th transverse. Prothorax in \Im slightly longer than wide, in \Im about equal in length and width, apex about half the width of base, base strongly bisinuate, sides straight, posterior angles

acute. Scutellum feebly raised. E/ytra more than twice the length of prothorax and much wider (especially in \eth) at base, subcordate, apex feebly but distinctly emarginate; striate, the striæ almost entirely concealed except towards sides and apex, the sutural one is, however, traceable throughout; shoulders rounded, raised, a depression at their sides immediately behind sides of prothorax. Under surface and legs densely punctate, the punctures entirely concealed by scales. Anterior tibiæ with small obtuse teeth on their lower surface. Length $6\frac{2}{3}$, rostrum $2\frac{3}{5}$; width $3\frac{1}{9}$ mm.

Hab.—South Australia—Western New South Wales. Common in collections.

I have described the usual form of the dark mottling of scales, but it is extremely variable; in several specimens under examination the prothoracic scales are entirely white, and on the elytra there are but few dark spots, some eye-like in character.

Var. BICRUCIATUS (Faust MS.).

Scales white; a slight brown patch on forehead; on elytra a sutural patch of brown scales commencing at scutellum, triangularly dilated then suddenly narrowed and again dilated, the second patch enclosing a white spot and terminated at middle; sides about middle with two spots, the posterior one of which encloses a white spot, each side of apex with a small brown spot.

Hab.—Australia (Herr J. Faust) — N.A.: Victoria River (Mitchell's Expedition)—W.A.: Swan River (Lea).

A well marked but not always constant variety; both dilated spaces on the suture may enclose a white spot, or neither may. In a pair (taken in cop.) from the Swan River the Q is exactly as described, but the G has the markings black, with a patch on the prothorax and additional markings on the elytra; it shows a decided approach to some of the varieties of luctuosus.

AONYCHUS STRIATUS, n.sp.

Black, rostrum highly polished and tinged with red, antennæ piceous-red, eyes dark brown. Densely clothed with white

adpressed scales; above with greyish- or pale sooty-brown scales forming on prothorax a broad median stripe not continuous to apex, with a few small spots and a feeble white stripe down its middle; scutellum with white scales; elytra with numerous white transverse spots seldom extending over one interstice, and sometimes partly confluent; the spots are more numerous towards base and sides than elsewhere; posterior declivity with a white stripe on suture; head with white scales, rostrum entirely nude.

Head densely punctate; ocular fovea elongate, rather distinct. Rostrum as long as prothorax, distinctly curved, subparallel to insertion of antennæ, densely punctate at extreme base and sides, smooth elsewhere. Scape not as long as two basal joints of funicle, these subequal, about once and one-half the length of 3rd, 3rd-7th gradually decreasing in length, none of them transverse. Prothorax transverse, sides rounded, base strongly bisinuate, apex slightly more than half the width of base. Scutellum subquadrate, not at all raised. Elytra about twice and one-half the length of prothorax, and at base scarcely more than once and one-quarter the width, subcordate, apex entire; with ten striæ on each elytron, narrow, but distinct throughout and apparently with elongate punctures. Under surface as in the preceding. Anterior tibiæ with numerous small distinct teeth, less numerous and noticeable on the two posterior. Length $5\frac{1}{2}$, rostrum 2; width $2\frac{3}{4}$ mm.

Hab.—N.W. Australia (Macleay Museum).

In this species the prothorax is more rounded than is usual; the white scales in the dark prothoracic stripe occasionally form a feeble cross; A. argus and A. lineatus are the only other species with visible elytral striæ; in the others they are concealed by scales except at sides and apex.

Aonychus Luctuosus, Pasc.; l.c. No. 5533.

Black, rostrum highly polished, eyes dark brown. Densely clothed with narrow white elongate adpressed scales, mixed above with sooty-black scales irregularly dispersed, and either occupy-

ing more or less than half the surface; on the prothorax the black scales usually form a broad stripe down the middle, sometimes leaving a white median line, and often they occupy the whole surface except for a few small white spots; the scutellum is usually entirely covered with white scales; occasionally, however, there are a few black ones at the sides; on the elytra the black scales are massed more towards the suture than elsewhere, but in nine specimens under examination not two are similarly clothed; sometimes they appear as if spotted with black and sometimes with white; the white scales appear sometimes in short white lines. Under surface and legs usually entirely clothed with white scales, but occasionally a few black ones at sides of meso- and metasternum, on coxe and base of femora. Head with black and white scales irregularly mixed; rostrum entirely nude.

Head densely punctate; ocular fovea appearing as a shallow transverse impression. Rostrum the length of prothorax, distinctly curved, parallel to insertion of antennæ, base and sides densely punctate, smooth elsewhere, in 3 slightly wider near apex than in 3. Scape distinctly shorter than two basal joints of funicle; 2nd joint longer than 1st and almost the length of 3rd-6th, 5th-7th globular. Prothorax as long as wide in 3, in 30 transverse; sides rounded; base strongly bisinuate, apex more than half the width of base. Scutellum feebly raised. Elytra about once and one-third the width of prothorax, subcordate, shoulders rounded, somewhat prominent, apex feebly emarginate; striation only visible at extreme sides and apex. Tibiæ with small distinct teeth, more numerous on the anterior than on the four posterior. Length $3\frac{1}{2}$, rostrum $3\frac{1}{4}$; width $3\frac{1}{4}$ mm.

Hab.—W.A.: Swan River.

A common and extremely variable species, originally described from a headless specimen. I have specimens measuring from 4 to $6~\mathrm{mm}$.

Aonychus argus, n.sp.

Black, rostrum highly polished, antennæ piceous-red, eyes dark brown. Densely covered with white adpressed scales; prothorax with four somewhat angular spots of brown scales, two slightly in advance of middle and two at base; elytra with eighteen spots similar to those on prothorax, four on each side of suture, the 1nd and 3rd of which are larger than the others; the two basal pairs are nearer each other than the two apical pairs, but in each row all are equidistant; a small spot on each side of shoulders, two at equal distances behind them, and a small narrow spot on the side at about one-third from apex; base of rostrum with a few white scales, elsewhere smooth.

Head densely punctate ocular foves indistinct. Rostrum the length of prothorax, distinctly curved, base and sides densely punctate, emosth elsewhere. Scape not much longer than let joint of funicle, ist-ind equal in length. 2nd as long as 3rd-4th, 5th-6th globular, 7th transverse. Prothorax as long as wide, sides rounded, base strongly bisinuate, apex about two-thirds the width of base in 2, less in 3. Scatelling very slightly raised. Eleter oclong-cordate, base trisinuate, apex feebly emarginate; base about once and one-third the width of prothorax; with eleven strike distinct throughout but the punctures concealed. Mesoscernal receptable shallow, wisely transverse, sides touching extreme bases of intermediate tions. Legs rather about, tibis stout, the two anterior pairs with small teeth beneath. Length 5, rostrum 1½; width 1½ mm.

Hab - North-West Australia Madieay Museum), King's Sound Mr. W. W. Frograte

The spots are alightly variable in size, but their shape and position are constant, though occasionally a small spot on the elytra may disappear. On first examining the rost um of the Q it appears to be carrinate at the base, but this is in consequence of alight rows of punctures leaving a shining space.

ADVICEUS PACHIPUS, MAP.

Black, restrum highly polished, eyes dark brown. Densely clothed with white scales, on elytra a stripe of brown scales extending from scattellom to about the middle, where it terminates

in a point; the stripe is parallel for most of its length, and covers two inter-tices; elsewhere the scales are white: rostrum with a few small scales at extreme base, elsewhere nude.

Head densely punctate; ocular foves longitudinal, distinct. Rostrum curved, slightly longer than protherax, punctate at base and sides and with a few straggling punctures to near the middle. Scape longer and thinner than is usual, longer than first two joints of funicle, these also slightly longer than usual, 2nd joint distinctly longer than 1st or 3rd-5th combined, 5th-6th globular, 7th transverse. Patheran longer than wide, convex, sides almost straight, apex not much more than half the width of base, base strongly bisinuate: scales on the disc slightly raised and allowing punctures to be seen Schiellun transverse, not at all raised Elytra oblong-cordate, not much wider than prothorax at base, shoulders rounded, rather prominent, apex feebly emarginate, striation very feeble and only noticeable at extreme apex and sides. Mesosternal receptacle as in the preceding. Legs short, thick; all the tibiæ with small teeth beneath. Length 41, restrum 12: width 22 mm.

Hab. - W.A.: Swan River.

I have but one specimen (taken with the sweep net at Midland Junction): it is probably a female, but the sexual characters in Anagchus are so very slight that (without dissection) it is almost impossible to tell the sex of a unique specimen.

AONYCHUS LINEATUS, l'asc.: Ac. No 5532.

Black, rostrum shining; antenuæ (the club black) dingy-red. Clothed with whitish, variegated with pale greyish-brown scales, having a striped appearance on elytra, the stripes distinct (especially on suture) to the naked eye, but indistinct under a lens.

Rostrum long, thin, moderately curved, parallel-sided, finely punctate; behind antennæ feebly ridged in middle. Funicle with the second joint once and one-third the length of 1st, 6th and 7th strongly transverse. *Prothorax* moderately transverse, base strongly bisinuate. *Elytra* considerably wider than prothorax, shoulders subtuberculately produced, striate-punctate, punctures concealed, striæ moderately distinct; interstices wide, gently convex; apex feebly emarginate. *Tibiæ* with numerous minute teeth which are traceable with difficulty. Length 8, rostrum 3; width 5 mm.

Hab.—W.A.: "Champion Bay" (Pascoe).

The largest and most distinct species in the genus. The specimen described has been kindly lent to me for examination by Mr. George Masters.